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10/027,444

12/21/2001

Robert G. McFarland

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11/28/2005

Attn: Nathan O. Jensen
ROCKWELL COLLINS, INC.
M/S 124-323
400 Collins Rd. NE
Cedar Rapids, IA 52402

EXAMINER

DYKE, KERRI M

ART UNIT

PAPER NUMBER

2667

DATE MAILED: 11/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/027,444 | Applicant(s) MCFARLAND ET AL. | |
| | Examiner Kerri M. Dyke | Art Unit 2667 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) . Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>12/21/2001</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is a correction to the previous communication, which was sent in error and has been withdrawn.

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Muramatsu (JP 403010547 A).
4. In regards to claim 1, Muramatsu discloses a method for sending identifying information, comparing the identifying information to the received information, indicating the results of the comparison to the sending node, and resending the un-received portion. In the embodiment section on pages 2-3 Muramatsu discloses dividing the message into equal parts and resending only the parts that are not received. It is therefore inherent that identifying information must be sent and compared in order for the appropriate sections to be resent after interference occurs. Muramatsu does not disclose a wireless network, but the recitation of a wireless network has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or

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the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone.

See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

5. In regards to claim 2, Muramatsu discloses the method of claim 1, wherein the receiving node identifies a size of the portion of the sent message that has not been received. Because each message is divided into equally sized portions, the size of the un-received message is inherently known.

6. In regards to claim 3, Muramatsu discloses the method of claim 2, wherein the receiving node identifies a location of the portion of the message that has not been received. Muramatsu divides each message into segments so the location of the failed transmission is inherently known.

7. In regards to claim 4, Muramatsu discloses the method of claim 1, wherein the received message has a size, and further wherein the receiving node identifies the size of the received message. The size of the received message is inherently the number of segments sent times the size of each segment. Since both the number of segments received and the size of each segment are known, the size of the received message is inherently known.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muramatsu (JP 403010547 A) in view of Rondeau.

10. In regards to claim 5, Muramatsu discloses the method of claim 1, but not further including re-transmitting the sent message to the receiving node if a predetermined time elapses before the response is received by the sending node.

Rondeau discloses a time-out and resend feature if a response is not received in column 2 lines 20-24.

It would have been obvious to one of ordinary skill in the art to time-out and resend data if a response is not received within a predetermined time period because doing so ensures the message is received at the end node, as taught by Rondeau in column 2 lines 14-24.

11. Claim 8, 15-17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muramatsu (JP 403010547 A) in view of Miller (US 6,567,395).

In regards to claim 8, Muramatsu discloses the method of claim 1, but not wherein the transmissions between the first node and the second node are accomplished over a frequency in the HF spectrum.

Miller discloses a wireless HF network in column 1 lines 38-39.

It would have been obvious to one of ordinary skill in the art to use the method for efficiently resending portions of a message that have encountered interference within the HF network because HF networks are susceptible to interference, as taught by Miller in column 2 lines 10-16.

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12. Claim 15 differs from claim 1 only because it recites and give patentable weight to the limitation of a single-channel wireless network. Muramatsu discloses the method of claim 1, but not a single-channel wireless network.

Miller discloses a single-channel wireless HF network in column 1 lines 38-39.

It would have been obvious to one of ordinary skill in the art to use the method for efficiently resending portions of a message that have encountered interference within the HF network because HF networks are susceptible to interference, as taught by Miller in column 2 lines 10-16.

13. Claim 16 is rejected upon the same grounds as claim 2.

14. Claim 17 is rejected upon the same grounds as claim 3.

15. In regards to claim 19, Muramatsu and Miller discloses the single-channel wireless communications system of claim 15, wherein the first node and second node are configured to transmit over a frequency in the HF spectrum (Miller col. 1 lines 38-39).

16. Claims 6-7, 9-12, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muramatsu (JP 403010547 A) in view of Gaskill et al. (US 5,682,148).

17. In regards to claim 6, Muramatsu discloses the method of claim 1 wherein the description of the sent message includes at least a size of the sent message, but does not disclose including a name of the sent message.

Gaskill et al. disclose assigning numbers to messages at origination in column 2 line 19.

It would have been obvious to one of ordinary skill in the art to assign a unique name, such as a number, taught by Gaskill et al., to each portion of the segmented message taught by Muramatsu.

The motivation for doing so is given by Gaskill et al. in column 2 lines 28-29, where it is disclosed that the inclusion of a unique name can facilitate identification of missing messages.

18. In regards to claim 7, Muramatsu discloses the method of claim 6, but does not disclose wherein the description of the sent message further includes at least one of a time stamp, a checksum related to the sent message, and a destination address.

Gaskill discloses in column 1 lines 24-30 that each message is sent in association with a destination address.

It would have been obvious to one of ordinary skill in the art to include the destination address as taught by Gaskill in the identifying information as taught by Muramatsu because doing so will allow for message reception at only the intended receiver, as taught by Gaskill in column 1 lines 24-30.

19. Claim 9 is rejected upon the same grounds as claim 6. Muramatsu and Gaskill do not disclose a single-channel, wireless HF network, but the recitation of a single-channel, wireless HF network has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

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20. Claim 10 is rejected upon the same grounds as claim 2.

21. Claim 11 is rejected upon the same grounds as claim 2.

22. Claim 12 is rejected upon the same grounds as claim 3.

23. Claim 14 is rejected upon the same grounds as claim 7.

24. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muramatsu (JP 403010547 A) in view of Gaskill et al. (US 5,682,148) further in view of Rondeau (US 5,734,643).

25. In regards to claim 13, Muramatsu and Gaskill disclose the method of claim 9, but not further including re-transmitting the sent message to the receiving node if a predetermined time elapses before the response is received by the sending node.

Rondeau discloses a time-out and resend feature if a response is not received in column 2 lines 20-24.

It would have been obvious to one of ordinary skill in the art to time-out and resend data if a response is not received within a predetermined time period because doing so ensures the message is received at the end node, as taught by Rondeau in column 2 lines 14-24.

26. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muramatsu (JP 403010547 A) in view of Miller (US 6,567,395) further in view of Rondeau (US 5,734,643).

27. In regards to claim 18, Muramatsu and Miller disclose the single-channel wireless communication system of claim 15, but not further including re-transmitting the sent message to

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the receiving node if a predetermined time elapses before the response is received by the sending node.

Rondeau discloses a time-out and resend feature if a response is not received in column 2 lines 20-24.

28. It would have been obvious to one of ordinary skill in the art to time-out and resend data if a response is not received within a predetermined time period because doing so ensures the message is received at the end node, as taught by Rondeau in column 2 lines 14-24.

Conclusion

29. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Gonia et al. (US 5,500,864) disclose the use of a checksum for error detection in a received message.
- b. Suzuki (JP 56136056 A) discloses comparing a received message with identifying information to determine if an error has occurred.
- c. Hara (JP 60062758 A) discloses comparing a received message with identifying information to determine if an error has occurred.
- d. Yoshida (JP 60093855 A) discloses comparing received data with transmitted data for error detection.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kerri M. Dyke whose telephone number is (571) 272-0542. The examiner can normally be reached on Monday through Friday, 7:30 am - 3:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

kmd


CHI PHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 11/23/05